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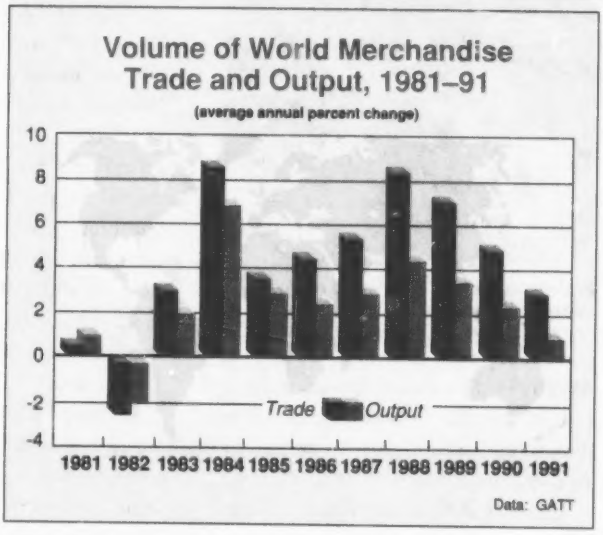
World Trade Volume Registers Smallest Gain Since 1983, Says GATT

Growth in the volume of world trade slowed in 1991 for the third year in a row, according to the annual report of the Director General of the General Agreement on Tariffs and Trade (GATT), which was released on March 18, 1992. Last year's 3 percent growth in world trade volume was the smallest gain since 1983. At the same time, the value of world trade grew by only 1.5 percent, following a 13.5 percent jump in 1990; it was the smallest gain since 1985.

Despite the slowdown, however, trade continued to expand faster than output. Moreover, preliminary figures for the last half of 1991 suggest that a modest recovery of world trade may be under way, with the GATT report forecasting a 1992 gain in trade volume in the neighborhood of 4 percent. "Success in the current round of trade negotiations," the report states, "would make a tangible contribution to an improved outlook for the world economy."

The United States surpassed Germany *(Please turn to page 116)*



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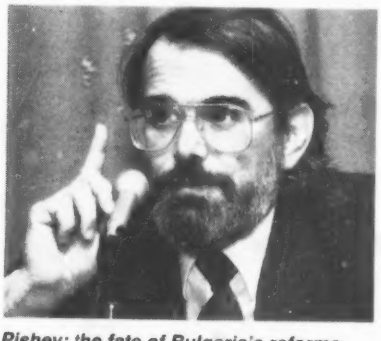
SELECTED TOPICS

IMF Seminar Participants Examine Bulgaria's Economic Reforms

Ognian Pishev, Bulgaria's Ambassador to the United States, and Lubomir Christov, Chief Economist of the Bulgarian National Bank, offered a frank and detailed examination of the nature and scope of Bulgaria's economic transition in a March 11 Economic Forum seminar held at the IMF Visitors' Center. The discussion, which was chaired by Anoop Singh, an Assistant Director in the IMF's European I Department, provided Pishev with the opportunity to detail the chronology of Bulgaria's reform efforts and outline its long-term goals, while Christov concentrated on the issues, pace, and direction of Bulgaria's stabilization program.



Pishev: the fate of Bulgaria's reforms depended on its success in transforming itself into a market economy.

Background

Pishev, who helped fashion Bulgaria's new economic program, reviewed the steps leading to, and the policy discussions underlying, the country's economic reform process. Recalling the "intensive economic debate" that stirred the country in late 1989 and early 1990, Pishev identified several early and important themes in that debate, including an awareness that the fate of Bulgaria's reforms depended on its success in transforming itself into a market economy and that a potential link existed between stabilization and the transformation of the economy.

"The initial reaction of the then ruling Communist party was to fight the economic crisis and then think about changing the economy," Pishev observed. "But the democratic economists believed that stabilization should be the first step of economic transition. One of the major accomplishments of the last few years was that we did not remain at the *perestroika* phase, but moved resolutely to stabilization as a significant change in the economy."

Efforts to achieve a national consensus preoccupied these early discussions, he noted. But bipartisan cooperation ended when the Communist-led Government published a jointly drafted reform document as its own. "All of a sudden, we discovered we could not think of the economy in neutral technical terms," he said. "It became obvious that political factors would always prevail over rational economic thinking."

By June 1990, the seemingly stark choice between shock therapy and a gradual approach to economic reform had become a major theme in the country's first election. But Pishev, and many of Bulgaria's reformers, rejected this choice, arguing that it simply created a false dilemma. Both methods could, and should, be pursued, he said. "Obviously when we talk about qualitative changes in the character of the economic system," he noted, "some elements can be introduced only gradually. We cannot, for example, create a new entrepreneurial class overnight. On the other hand, there are elements that should be introduced immediately."

By the fall of 1990, however, it was clear that the country's economy was in serious difficulty. Living standards had fallen dramatically, and domestic supplies and foreign currency reserves had been exhausted—the latter in a vain effort to meet debt obligations and attract new capital flows. What Pishev termed "the deepest forms of social unrest" brought down the last Communist-dominated Government and prompted a broad and serious discussion of market-based reforms. By February 1991, all the essential elements of the reforms had been introduced. For a country like Bulgaria, Pishev said, "price liberalization was extremely important if we wanted to achieve some form of balance between supply and demand, given the existing level of inventories and demand in the economy." It had also become clear to the reformers, he added, that introducing a market-based exchange rate was the only means of compensating for a lack of external financial support for Bulgaria, and opening the economy was the major instrument of restructuring the national economy.

Stabilization Program

To prevent a "total collapse of the Bulgarian economy and society," Christov said, the Government launched a stabilization program backed by a one-year stand-by arrangement with the IMF. The broad aims of the program were similar to those of other Eastern European countries: a restoration of macroeconomic stability and the beginning of comprehensive structural reforms.

"What distinguishes the Bulgarian case," Christov observed, "is the extent of the initial price shock and the drop in output associated with the first steps of reform." The cost, in terms of lost GDP and employment, proved significantly greater than anyone had anticipated and was, in fact, greater than that experienced by other Eastern European countries. Bulgaria's 308 percent increase in the consumer price index, recorded in February–March 1991, has been exceeded only by the former Soviet Union's recent experience. Bulgaria also recorded a 23 percent drop in its real product and saw its GDP approach 68 percent of its 1988 level.

How could this performance be explained? Christov cited three factors: large internal imbalances, several external shocks that coincided with the beginning of the reform process, and shortfalls and delays in foreign financing. Internally, the country was coping with shortages of energy, raw materials, and consumer goods, and an enormous monetary overhang. "The whole Bulgarian population could have stopped working," Christov said, attempting to give tangible dimension to the overhang, "and preserved the level of their consumption for a whole year, relying only on savings."

The external shocks were multiple and severe. Intra-CMEA trade collapsed, and the Middle East crisis disrupted Bulgaria's trade with the region, its second most important market. A March 1990 moratorium on the servicing of foreign debt had also effectively cut Bulgaria off from international financial markets.

The stabilization program that Bulgaria undertook sustained a number of major reforms: it completely freed prices, entailing a sharp drop in subsidies; liberalized the trade regime; and took several decisive steps toward the reform of the banking and tax systems. Major issues still to be addressed, Christov said, were large-scale privatization and the remainder of the banking reforms.

Lubomir Christov: Bulgaria's economic reform efforts "must be gauged by what could have happened, but did not."

Was the 1991 stabilization program effective? Christov first responded with an anecdote. "One no longer has to get up at 4 or 5 a.m.," he said, "to line up for bread and milk. Items that in the past might not even be available when one finally reached the counter now are available, but at ten times higher prices."

To measure the program's real effectiveness, however, he argued that Bulgaria's economic reform efforts "must be gauged by what could have happened, but did not. And what could have happened is clear now from the experience of Poland and Russia." Achieving rapid success for an orthodox stabilization program in former socialist countries was, he said, "very difficult, if not impossible." He did note, however, that broad structural reforms are essential to achieve sustained macroeconomic balances and noninflationary growth, and consistent structural reform takes time.

Were Bulgaria's structural reforms undertaken too slowly? Timing and complementarity are often critical in a stabilization program, and some observers argued that faster structural reform in Bulgaria might have blunted the severity of the losses the country experienced in production and employment. Christov noted that the short-term orientation of the previous Government and the short-term nature of the stabilization program both worked against longer-term perspectives. The wise advice of what might have been, he argued, simply did not match Bulgaria's political reality.

Christov also expressed disappointment that the IMF and the World Bank had referred to Bulgaria's structural reforms as being delayed. He believed the evidence on hand and international comparisons both contradicted this assessment. He expressed concern that such an assessment "tends to be interpreted not as advice to accelerate reforms, which is necessary and important, but as something that casts doubt on the commitment of the Bulgarian Government to economic reform. The final results might only give greater support to the Communist opposition in Bulgaria and divert the attention of the present Government away from designing and implementing necessary reforms."

Singh noted that Christov had "gently reminded us that we shouldn't be impatient." But Singh also cited the very heavy cost that Bulgaria had borne in terms of sharply reduced output and employment; he suggested

READEX FICHE

that perhaps future costs might be mitigated by privatizing enterprises and agricultural land as rapidly as possible.

As Christov looked to the future, he noted two elements—access to industrial country markets and debt relief—that would be critical to Bulgaria's success. Labeling Bulgaria's external debt an enormous problem, he stressed the "very ridiculous structure of our debt" (80 percent owed to private commercial banks and 40 percent representing short-term debt). Rescheduling is urgently needed, he added; debt cannot be serviced from negative growth and declining exports.

Anoop Singh: future costs might be mitigated by privatizing enterprises and agricultural land as rapidly as possible.

Foreign assistance is needed, Christov argued, particularly at this juncture. "The country combined rapid liberalization with virtual isolation from the international financial markets and fast and peaceful democratization. Please don't ask me how. I don't know. What I know is this infeasible combination cannot last forever."

Reintegration in World Economy

Echoing Christov's call for both greater foreign assistance and wider access to industrial country markets, Pishev stressed the importance of reintegrating Bulgaria into the world economy. "After four decades of self-imposed isolation, Bulgaria was initially not ready to face international competition," he said. An overindustrialized country geared to the needs of the Soviet market, Bulgaria's economy was vulnerable to disruptions in energy supplies and in traditional international markets. Compounding these problems, he noted, was the fact that problems associated with Bulgaria's transition had led to additional declines in GNP, production, and living standards.

Over the past two years, Bulgaria has gained admission to the IMF and World Bank, participated in the European Bank for Reconstruction and Development, and pursued negotiations with the General Agreement on Tariffs and Trade. It has also intensified its contacts with other countries. Pishev noted that Bulgaria has been granted most-favored-nation status by the United States, concluded an agreement with the U.S. Overseas Private Investment Corporation on direct investment, and had coverage for short-term trade credits extended by the U.S. Export-Import Bank. Negotiations with other countries, particularly with Europe's major industrial countries, have not yet yielded similar results, he said, reiterating a concern that Christov had raised.

What Pishev hoped to see for Bulgaria over the long term, he said, was something akin to the successes achieved by countries like Belgium and Denmark in affecting a "seamless integration with the world economy." Regional integration held less appeal for him. "I don't believe, as some have argued, that the future of Eastern Europe lies in merging the economies of Central and East European economies into the European Community. Regional integration is the second best solution to free trade. I believe in comparative advantage. I believe in free trade."

Photo credits: Denio Zara and Padraic Hughes, IMF. World Bank, page 121.

World Trade To Pick Up In 1992

(continued from front page) Germany as the world's leading merchandise exporter, according to the GATT. In achieving this, the United States boosted the value of its exports by 7.5 percent, five times the world average. In contrast, U.S. imports dropped by 1.5 percent. In dollar terms, Germany's exports declined by 4.5 percent, while its imports rose by 9.5 percent.

The three largest trading nations (the United States, Germany, and Japan) reported major changes in last year's current account balances: in dollar terms, the United States' deficit nearly disappeared, Germany moved into deficit for the first time since 1981, and Japan's surplus doubled. As a percentage of GDP, Japan's surplus was less than half the 1986 peak level.

The strongest overall growth in trade—both exports and imports—occurred in Asia, with the six leading nonmembers of the Organization for Economic Cooperation and Development (China, Hong Kong, Korea, Malaysia, Singapore, and Taiwan Province of China) experiencing growth rates last year of 10 percent to 20 percent for exports and of 8 percent to 30 percent for imports. At the other end of the spectrum, estimates indicate that the countries of Eastern and Central Europe and the former U.S.S.R. experienced a 20 percent decline in the value of their overall exports and a 25 percent drop in imports. In the former U.S.S.R. alone, imports fell by 42 percent.

The GATT report also notes the following significant developments:

• Antidumping investigations increased to 175 from 96, with the

Leading Exporters and Importers in World Merchandise Trade

(billion U.S. dollars and percent)

Rank 1990	Rank 1991	Exporters	1991 Value	1991 Share	Annual Change 1990	Annual Change 1991
2	1	United States	422	12.0	8	7.5
1	2	Germany	403	11.4	16	-4.5
3	3	Japan	315	8.9	5	9.5
4	4	France	217	6.1	20.5	—
5	5	United Kingdom	185	5.3	21.5	—
6	6	Italy	169	4.8	21	-1.0
7	7	Netherlands	133	3.8	22	1.0
8	8	Canada	129	3.7	5.5	2.0
9	9	Belgium-Luxembourg	177	3.3	17.5	-0.5
11	10	Hong Kong[1]	98	2.8	12	19.5
10	11	U.S.S.R.[3]	78	2.2	-0.5	-25.0
12	12	Taiwan Prov. of China	76	2.2	1.5	13.5
15	13	China	72	2.0	18	16.0
13	14	Korea, Rep. of	72	2.0	4	10.5
14	15	Switzerland	62	1.7	24	-3.5
17	16	Spain	60	1.7	25	8.0
18	17	Singapore[4]	59	1.7	18	12.0
16	18	Sweden	55	1.6	11.5	-4.0
19	19	Saudi Arabia	49	1.4	56.5	11.0
21	20	Mexico[5]	42	1.2	16	1.0
20	21	Austria	41	1.2	29.5	—
22	22	Australia	41	1.2	6	2.0
23	23	Denmark	36	1.0	25	3.5
26	24	Malaysia	35	1.0	17.5	18.5
24	25	Norway	34	0.9	25.5	0.5
		Total	**2,999**	**84.0**	**13.5**	**3.5**
		World	**3,530**	**100.0**	**13.5**	**1.5**

Rank 1990	Rank 1991	Importers	1991 Value	1991 Share	Annual Change 1990	Annual Change 1991
1	1	United States	509	13.0	5	-1.5
2	2	Germany	390	10.7	22	9.5
3	3	Japan	236	8.9	12	0.5
4	4	France	232	6.4	21.5	-1.0
5	5	United Kingdom	210	5.7	13	-6.0
6	6	Italy	183	5.0	19	0.5
7	7	Netherlands	124	3.4	2	2
8	8	Canada	124	3 4	21	-0.5
10	9	Belgium-Luxembourg	120	3.3	21	—
12	10	Hong Kong[2]	100	2.7	14.5	21.0
11	11	Spain	93	2.6	22.5	-6.0
13	12	Korea, Rep. of	82	2.2	13.5	17.0
9	13	U.S.S.R.	70	1.9	5.5	-42.0
15	14	Switzerland	66	1.8	19.5	-4.5
14	15	Singapore[2]	66	1.8	22.5	8.5
17	16	China	64	1.8	-10	19.5
18	17	Taiwan Prov. of China	63	1.7	4.5	14.5
16	18	Austria	51	1.4	26	3.5
19	19	Mexico[5]	50	1.4	19.5	23.5
21	20	Sweden	50	1.4	11	-9.0
20	21	Australia	42	2.2	-6.5	-1.0
22	22	Thailand	38	2.0	28.5	15.5
23	23	Malaysia	38	2.0	30	30.0
26	24	Denmark	33	0.9	19	3.0
24	25	Saudi Arabia	30	0.8	14	24.5
		Total	**3,064**	**83.8**	**13.5**	**1.5**
		World	**3,660**	**100.0**	**13.5**	**1.5**

[1] Includes re-exports. In 1991, they amounted to $69 billion compared with $53 billion in 1990.
[2] Includes substantial imports for re-export.
[3] Owing to valuation difficulties, the figures are only rough approximations. (See GATT, *International Trade 1990–91*, Vol. 1, Box 1.)
[4] Includes re-exports. In 1991, they amounted to $21 billion compared with $18 billion in 1990.
[5] Includes estimates of trade flows through processing zones.

Data: GATT

United States initiating 52 cases, Australia 46, Poland 24, and the European Community 15.

• The number of antidumping laws enacted and implemented in developing countries and in Eastern and Central Europe increased.

• Sixteen new countries have announced trade liberalization measures; moreover, 63 countries have taken such action since the beginning of the Uruguay Round.

• Brazil, Peru, Sweden, and Yugoslavia removed textile and clothing quota restrictions.

• The participation of Eastern and Central European nations in the GATT increased.

• GATT membership increased in 1991 by three countries (El Salvador, Guatemala, and Macao), with eight others filing applications to join; moreover, the three Baltic states and several members of the Commonwealth of Independent States have indicated an interest in joining.

The GATT report, while noting that developments in the trade area alone are not a panacea for all the ills confronting the world economy, emphasizes that "the increasing contribution of foreign trade to the GDP of countries and regions all over the world makes predictability and security in the international trading environment a critical factor in generating jobs, investment flows, and technology transfers, and, thus, in increasing economic production and growth." The report concludes that the current trade negotiations must succeed if the world economy is to improve.

Gerald R. Rosen,
Editor, *IMF Survey*

IMF Study Examines Impact of Resurgence In Regional Trade Arrangements

While regional trading arrangements are hardly a new phenomenon, they are a newly resurgent one, and the current focus on regionalism "may be qualitatively different from past efforts and may carry greater risks of becoming a substitute for, rather than a complement to, multilateralism," cautions a recently published IMF study. Among the differences, notes *Regional Trade Arrangements*, No. 93 in the IMF's Occasional Paper series, are the United States' interest in regionalism and regional arrangements that include industrial and developing countries.

Regionalism may carry greater risks of becoming a substitute for, rather than a complement to, multilateralism.

The study examines the instruments of integration and the effectiveness of existing arrangements in both industrial and developing countries and assesses the impact that growing regionalism in trade arrangements could have on the multilateral trade system, particularly the ongoing negotiations of the Uruguay Round. It was written by Augusto de la Torre and Margaret R. Kelly of the Trade and Payments Division of the IMF's Exchange and Trade Relations Department, with the assistance of Bernhard Fritz-Krockow and Miranda Xafa.

Industrial Countries

In global terms, it would be difficult to overestimate the potential significance of industrial country arrangements. The major regional groups in Europe (the European Community (EC) and the European Free Trade Association (EFTA)) and North America (Canada, Mexico, and the United States) together account for about 65 percent of world imports and nearly 50 percent of developing country exports. ANZCERTA, the Australia New Zealand Closer Economic Relations Trade Agreement, is currently the only Pacific Rim arrangement. Japan does not participate in a regional arrangement—the only industrial country not to do so. The Association of South East Asian Nations (ASEAN), while it does not function as a regional trade arrangement, has become an "effective interlocutor for cooperation in economic matters and foreign affairs with OECD [Organization for Economic Cooperation and Development] countries."

The study assesses the effectiveness of regional arrangements by measuring the degree to which they have kept to their implementation timetables and the extent to which they have increased intraregional trade. Implementation has generally not been a problem within industrial country arrangements. The EC, for example, has consistently implemented agreements on, or even ahead of, schedule. There is general agreement that regional arrangements among industrial countries have not so far hindered multilateral liberalization, because these countries have reduced barriers against nonmembers before, or in conjunction with, regional liberalization. The authors caution, however, that not all sectors have become more open to nonmembers; many sector-specific bilateral restraints involving agriculture, textiles, apparel, automobiles, and other sectors remain at the national level, often taking the form of "voluntary" restraint arrangements.

Regional arrangements in industrial countries initially contributed to an increase in intraregional trade, according to the study, but recent evidence is less conclusive. In the EC and EFTA, for example, intraregional trade increased markedly in their first ten to fifteen years but has leveled off or decreased in recent years.

The study cites several reasons why industrial country arrangements tend to increase intraregional trade and face fewer implementation problems than their developing country counterparts. First, trade liberalization is principally carried out in differentiated manufactures. This can be achieved "without major shifts in factor proportions and entails relatively lower transitional adjustment costs, particularly in terms of labor dislocation." Second, industrial countries are in a better position to absorb structural adjustment costs within the context of steady growth. Third, the industrial countries have postponed structural adjustment in sensitive sectors.

Given the growing importance of regional trade arrangements, the study examines whether the preferential treatment accorded to participating members will intensify discrimination against nonparticipating members. It concludes that three factors

will influence the extent of future discrimination:

• The course of the negotiations of the General Agreement on Tariffs and Trade (GATT). With industrial country discrimination concentrated in such areas as agriculture and textiles, which are subject to multilateral negotiations, a successful conclusion to the Uruguay Round could, the authors suggest, help ensure that regional arrangements "serve as building—rather than stumbling—blocks to global trade liberalization."

• The openness of the external trade regime. Given an open trade regime, nonmember countries could benefit from increased demand for imports, lower-cost exports from the regional groups, and expanded access through a regional market that was largely unhampered by administrative, technical, and regulatory barriers.

• The continued globalization of investment and production. "Foreign firms that have internationalized their operations and are already located within the geographic boundaries of the regional group," the paper suggests, "may gain from discrimination."

The paper warns that if either the EC or North America were to adopt a "fortress" trade policy stance, it could have "large negative effects on world GDP, on most countries, and on all regions, including the region that increases protection."

Developing Countries

For many developing countries in Latin America and sub-Saharan Africa, regional trade arrangements have been a key element in their policy agendas over the past three decades. The study examines the impact of the Latin American Free Trade Association (LAFTA), the Central American Common Market (CACM), the Andean Pact, and the Caribbean Common Market (CARICOM) in Latin America; the Economic Community of West African States (ECOWAS), the Preferential Trade Area (PTA), the Economic Community of Central African States (CEEAC), and the Southern African Development Coordination Conference (SADCC) in sub-Saharan Africa; and the Gulf Cooperation Council (GCC) in the Middle East. The study notes, however, that political interest in these arrangements has not always been translated into effective implementation of economic goals, and the overall impact of these arrangements has been limited.

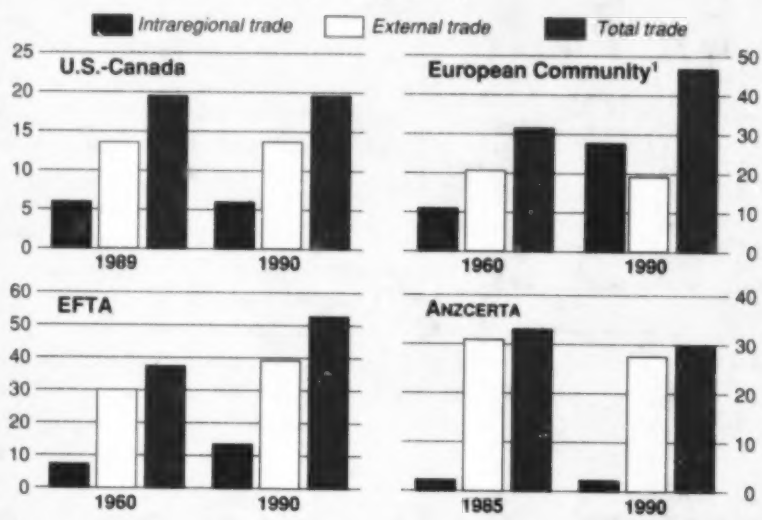
The same two criteria—whether these arrangements raised intraregional trade and whether these groups were able to keep to the implementation timetables they had set for themselves—are used to gauge the effectiveness of regional trade arrangements in developing countries. Generally, the study finds, regional arrangements among developing countries have not produced large or sustained increases in intraregional trade. (They have been more successful, it notes, in other areas of economic cooperation, including agricultural research and development, and coordination of investment incentives.)

Regional integration schemes failed to increase intraregional trade in part because the structural characteristics of developing countries limited the scope for potential gains and in part because so little of the intended integration was actually implemented, the study finds. Implementation delays were often grounded in a basic incompatibility between the inward-looking development strategies being pursued in national economic policies and the requirements of regional liberalization.

Strong vested interests in import-

Trade Developments in Industrial Country Arrangements

(percent of regional GDP)



[1] The figures for 1960 are for the original six members, with a GDP of $190 billion. Figures for 1990 are for the EC 12, with a GDP of $6 trillion.

Data: World Bank, *World Development Report*, 1991; and IMF, *Direction of Trade Statistics*

competing industries and a weakened external environment also thwarted efforts to liberalize intraregional trade. At the operational level, the study indicates, "timetables lacked automaticity, included 'positive' lists rather than across-the-board liberalization of tariff and nontariff barriers, and entailed restrictive rules of origin. This made it easier for members to backtrack in the face of balance of payments difficulties or not to implement reforms owing to the lack of supporting policies."

Few developing country regional groups removed barriers across the board. Mechanisms set up to allocate new industries among member countries on a nonmarket and negotiated basis were frequently crippled by massive administrative problems and the sharp conflicts of interest that became the basis for decisions in the absence of market criteria and clear comparative advantage.

Inappropriate macroeconomic policies also contributed to the poor implementation record. "Against a background of external and internal imbalances—often reflecting expansionary fiscal and monetary policies—country authorities unwilling to allow a substantial devaluation of their overvalued currencies also tended to resist meaningful reductions in trade barriers," the authors note. They cite the experience of the Central American Common Market in the early 1980s as an instance in which a successfully implemented regional arrangement with a relatively high level of intraregional trade was not supported by national policies and was ultimately undermined.

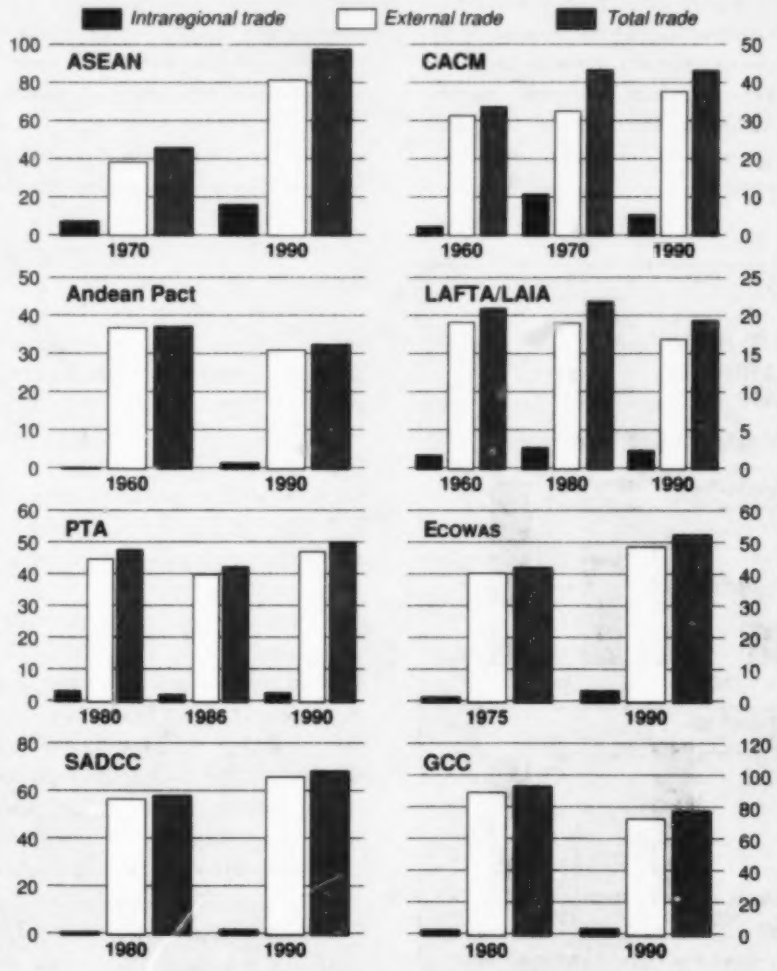
Political and institutional factors also impeded implementation. Many developing country arrangements, although modeled after the EC, "were unable to endow their integration agreements with the institutional effectiveness needed to achieve their often ambitious objectives." These difficulties were further exacerbated, in some instances, by conflicting political philosophies among members, political instability within member countries, and border conflicts.

The study notes that important distributional questions often went unaddressed. These questions reflected not only potentially uneven distribution of the short-term costs of economic dislocation and lost revenue but also concern that the dynamics of integration might, over time, favor the more developed of the member countries.

Even if implementation of regional arrangements had been successful, the authors conclude, structural constraints would have limited the po-

Trade Developments In Developing Country Regional Arrangements

(percent of regional GDP)



Data: World Bank, *World Development Report*, 1991; and IMF, *Direction of Trade Statistics*

tential gains. Their similar factor endowments, small markets, and low per capita incomes allowed them little scope for trade based on economies of scale and product differentiation. Likewise, the capacity to reallocate and rationalize productive resources was seriously constrained, given underdeveloped capital markets, barriers to entry, different tax and regulatory environments, and restrictions on intraregional factor mobility.

A survey of the literature suggests that developing countries would be better off "exploiting gains from trade based on differences in resource endowment and productive structure—seizing comparative advantages dynamically at every point in time as they build their human, capital, and technological stocks," the study maintains. This strategy is best pursued in the context of unilateral and multilateral liberalization. In this connection, the abandonment of import-substitution policies in developing countries in favor of outward-oriented policies is a positive development.

Implications for Multilateral System

The growing interest among industrial and developing countries in regional trade arrangements has coincided with a period of mounting frustration over the pace and productivity of multilateral negotiations. The study notes that "the GATT's inability to curb rising protectionist pressures since the end of the Tokyo Round has created frustration with the slowness of the GATT process and raised concerns about its effectiveness and its ability to adapt to the emerging trade issues of the 1990s." Also cited is the growing concern over lax implementation of GATT Article XXIV; nondiscrimination, once the cornerstone of GATT, has been undermined, the study finds, by exceptions and ambiguities.

In this setting, the authors find, regionalism has been advocated as an alternative to multilateralism, and the regional initiatives pursued by major industrial countries "have created the perception that preferential trading arrangements are here to stay." The United States appears to have shifted from a singular emphasis on nondiscrimination to a multiple approach encompassing unilateralism, regionalism, and multilateralism. Indeed, all the major countries, the authors suggest, "may be giving greater priority to regionalism in their trade policy agendas at the expense of multilateralism."

The authors acknowledge, however, that regional arrangements are likely to remain a feature of the international trading system and emphasize the importance of maintaining an outward orientation (to minimize trade diversion and ensure that developing countries are part of the globalization of investment and production) and of providing across-the-board intraregional liberalization with automatic timetables.

The risks of regionalism are several, the study warns, including "the possible diversion of scarce skills from multilateral to regional negotiations, the increased potential for friction among regional groups, and possible adverse effects on countries excluded from such arrangements." Despite efforts to liberalize areas not currently covered by the GATT, there is little evidence that regional arrangements will be able to tackle the areas most in need of substantive reform—such as agriculture, textiles, and apparel. The Uruguay Round may offer the best, and perhaps the only, means to reach an agreement in these areas, the study concludes.

Regional arrangements are likely to remain a feature of the international trading system.

Copies of Occasional Paper No. 93, *Regional Trade Arrangements*, are available at a cost of US$15.00 (US$12.00 for full-time university faculty and students) from Publication Services, Box S-346, International Monetary Fund, Washington, D.C. 20431, U.S.A.

SDR Rates

Week Beginning	Rate of SDR Interest and Charges (percent)
April 6	6.72
April13	6.45

The rate of SDR interest and charges is calculated weekly, by reference to a combined market interest rate, which is the weighted average of interest rates on specified short-term domestic obligations in the money markets of the five countries whose currencies constitute the SDR valuation basket (U.S. dollar, deutsche mark, Japanese yen, French franc, and pound sterling). The interest rates used are those that prevail each Friday. For the latest weekly rates, call (202) 623-7171.

Data: IMF Treasurer's Department

IMF ACTIVITIES

From the Executive Board . . .

Israel: Compensatory and Contingency Financing Facility. The IMF has approved a drawing by Israel equivalent to SDR 178.64 million (about $243 million) under the compensatory and contingency financing facility. The drawing relates to a shortfall in earnings from merchandise exports and services for the 12-month period ending September 1991. The shortfall is attributable to a temporary fall in demand for manufactured products as well as in receipts from tourism during the shortfall period because of the uncertainty created by the Middle East crisis.

Israel joined the IMF on July 12, 1954, and its quota is SDR 446.6 million (about $608 million). Israel has no outstanding financial obligations to the IMF.

Press Release No. 92/26, March 27

Argentina: Extended Arrangement. The IMF has approved a credit under an extended arrangement for Argentina, authorizing drawings of up to the equivalent of SDR 2,149.25 million (about $2,948 million) over the next three years in support of the Government's economic and financial reform program. At the request of the Argentine authorities, the arrangement will include set-asides to support future debt-reduction operations with Argentina's commercial bank creditors. The authorities also intend to request that the credit under the extended arrangement be augmented by an amount equivalent to 30 percent of Argentina's quota in the IMF when a debt-reduction package is agreed upon with commercial banks.

Approval of the three-year extended arrangement was accompanied by a review of the program under the current stand-by arrangement approved in July 1991 and by release of the third and final drawing under that arrangement in the amount of SDR 146.25 million (about $200 million).

Since the adoption in early 1991 of an economic stabilization and structural reform program centered on strengthening fiscal and credit discipline and on the Convertibility Law establishing the full backing of the monetary base in the context of a fixed exchange rate system, Argentina has succeeded in reducing inflation and restoring confidence and economic growth. Real GDP increased by 5 percent in 1991, the best performance since 1987, and consumer prices rose by just 8½ percent during the last six months of the year. The rate of inflation for the year as a whole was 84 percent, against 1,445 percent during 1990 and almost 5,000 percent during 1989. At the same time, a wide-ranging program of privatization and structural reform is opening up the economy and making the environment for resource allocation competitive and market based.

The 1992–94 economic program, which the IMF's extended credit supports, continues the basic policies pursued under the stand-by program. The program aims at consolidating the progress achieved in stabilizing the economy, strengthening and sustaining the economic expansion, and achieving external viability, including the regularization of relations with private external creditors through market-based debt and debt-service reduction. Under the three-year economic framework, real GDP is expected to grow at an average rate of just over 5 percent a year, and the inflation rate is projected to decrease to 4 percent a year by 1994.

The Argentine authorities intend to continue to transform the structures and institutions of the economy and to move away from decades of overregulation and state intervention toward a flexible, dynamic, and open economy based on private initiative. They are to achieve these objectives by maintaining a fiscal stance that is consistent with price stability and long-term solvency of public finances and a monetary policy based on convertibility mechanisms. Structural reforms under the program include tax reform, further reductions in public sector employment, privatization of the bulk of remaining public sector enterprises by the end of 1992, reform of the social security system, further deregulation of the economy, measures to achieve greater flexibility in labor markets, and steps to encourage financial intermediation and develop the capital market.

The economic program, by aiming at price stability, tends to safeguard the lower-income groups. In addition, reform of the family subsidies and social benefits programs will improve delivery of social benefits by reducing waste and duplication, and reform of social security will improve benefit levels. Deregulation will improve income distribution by removing barriers to entry and by reducing economic rents flowing to certain higher-income groups. However, the most significant benefits for lower-income groups are likely to result from stable prices and employment creation based on sustained economic growth.

Argentina has been a member of the IMF since 1956, and its quota is SDR 1,113 million (about $1,527 million). Its outstanding financial obligations to the IMF resulting from past operations and transactions currently total the equivalent of SDR 1,533 million (about $2,103 million).

Press Release No. 92/27, March 31

Sierra Leone: Economic Program. The IMF has endorsed Sierra Leone's economic program for 1992–93 and agreed that Sierra Leone can accumulate "rights" during the period through February 1994 up to a maximum of SDR 87.3 million (about $119 million), close to the current level of its arrears to the IMF. Upon successful implementation of this program and clearance of its IMF arrears, Sierra Leone would be able to request use of IMF resources under a successor IMF-supported program.

The accumulation of rights by Sierra Leone is the third such decision approved

by the IMF, in addition to Peru and Zambia, under the intensified collaborative approach endorsed by the IMF Interim Committee in May 1990. Through this procedure, a member with protracted arrears to the IMF at the end of 1989 could earn rights based on its performance under an IMF-monitored macroeconomic and structural reform program. It can then encash the accumulated rights as the first disbursement under a successor IMF-supported program.

Despite its rich natural resources, Sierra Leone has suffered a steady and prolonged economic decline over the last two decades. Direct or indirect state control over external and internal trade was pervasive, fostering widespread economic distortions; exchange rate and pricing policies discouraged agricultural production and encouraged smuggling; fiscal policies accommodated large nonproductive expenditures; and monetary policy discouraged savings and fostered financial dislocation. External payments arrears accumulated, and international reserves were depleted. Annual per capita income was halved; and the infrastructure suffered severe disrepair, with chronic shortages of electricity, petroleum, and water. Moreover, Sierra Leone's rich natural resources either remained grossly underutilized or generated income that continued to escape official channels.

In late 1989, the Sierra Leone authorities began far-reaching macroeconomic and structural reform efforts to reverse this massive decline. Over the last two years, they have made considerable progress in removing state controls, including eliminating price controls, abolishing import licenses, terminating the state marketing monopoly on major export crops, adopting a market-determined exchange rate, and reforming the banking system. It proved difficult, however, to achieve the objective of bringing about macroeconomic stability, owing in part to the inflow of a large number of refugees and subsequent security problems, but also to insufficient progress in strengthening economic management. Since the adoption of a new constitution in September 1991, the new Government has improved fiscal management—by increasing revenue and strengthening expenditure control mechanisms—and tightened the monetary stance. Nonetheless, difficulties persist: inflation still runs at the rate of 80–90 percent a year, and severe shortages of petroleum and other essential products continue. Large external imbalances remain, with the current account deficit increasing to an unsustainably high level in 1992. Real GDP is expected to continue to decline this year.

The 1992–93 program constitutes a further important effort to stabilize the economy, improve resource allocation, and strengthen the external payments position. It seeks to halve the rate of inflation by the end of 1992 from 115 percent in 1991, and to reduce it further in 1993. The current account deficit is projected to narrow substantially in 1994 and to decline further over the medium term. Following a drop in real GDP in 1991–92, owing largely to the disruption of agricultural production and trade as a result of security problems, the program aims at restoring the growth rate to 4–5 percent in 1993–94.

To achieve these objectives, the program will focus on strengthening financial discipline in the Central Government and public enterprises; tightening monetary control through active open market operations and the establishment of positive real interest rates; developing a fully functioning foreign exchange market; and improving management of Sierra Leone's rich natural resources. The authorities are also pursuing a number of important structural reforms, including civil service reforms, privatization and public enterprise reforms, and petroleum pricing and marketing reforms.

The rights accumulation program is to be the beginning of a long road toward sustainable recovery. Successful implementation of the program would improve the country's prospects for economic growth and external viability over the medium-term. Meanwhile, Sierra Leone is expected to require exceptional balance of payments support for several more years.

Sierra Leone joined the IMF on September 20, 1962, and its quota is SDR 57.90 million (about $79 million). Its outstanding financial obligations to the IMF, including arrears, currently total the equivalent of SDR 87.8 million (about $120 million).

Press Release No. 92-19, April 3

Czech and Slovak Federal Republic: Stand-By Credit. The IMF has approved a stand-by credit for the Czech and Slovak Federal Republic, authorizing drawings up to the equivalent of SDR 236 million (about $322 million) over the next 12 months in support of the Government's economic and financial program.

The Government's economic program for 1992 seeks to consolidate the gains that were made during 1991, when it launched a major liberalization of the economy, and to accelerate the process of structural economic reform, particularly privatization.

Since the "velvet revolution" of November 1989, the Government has been working toward establishing a market economy through price and trade liberalization and privatization. On January 1, 1991 it lifted controls on prices accounting for 85 percent of turnover, withdrew quantitative import restrictions from all but a few items, and made foreign exchange freely available to registered businesses for most current account transactions.

Significant progress was made under the 1991 program despite some severe shocks to the economic system, including the uncertainty associated with the transformation process and the disruptions of major export markets with other members of the former Council for Mutual Economic Assistance. Prices virtually stabilized, the external reserve position strengthened, the current account was in surplus, and, despite a substantial fall in output, the consensus supporting the economic reforms appears to be holding.

The Government's economic program for 1992 is designed to limit the fiscal imbalance without undermining incentives and weakening the supply side of the economy. It will accomplish this goal through a better targeting of the social safety net and containing current expenditures, although public investment in worthwhile projects will be increased. Monetary and credit policies will support the budgetary objectives and allow for a

modest increase in credit to enterprises and households.

The authorities also intend to maintain the fixed exchange rate for the koruna, which is playing a central role in constraining domestic prices and wages within reasonable bounds.

The centerpiece of the Government's systemic reforms in 1992 is privatization. However, major changes are also being made in the banking system, and the legislative and administrative framework will be established for the new tax system to be introduced in 1993.

State control of small-scale businesses is expected to be completely phased out by the end of 1992; in 1991, about 25,000 small businesses were sold and many more privatized by restitution. The rapid privatization of large enterprises is now ready to proceed. More than half the privatizations in 1992 will be achieved through a voucher system, under which each adult citizen can acquire a limited number of vouchers at a cost of about one week's average wage. These vouchers can be exchanged for equity in companies, either directly, or through Investment Privatization Funds, of which about five hundred have been established.

The authorities have also made plans for more conventional sales and joint ventures with foreign investors. Altogether, the authorities are evaluating privatization plans (including the voucher system, conventional sales, or some mix of the two) for about 2,500 enterprises.

In their continuing reform of the banking system, the authorities are steadily improving their ability to monitor and control reserve money indirectly, and laws have been enacted and regulations are being put into place to establish a modern financial system. They have taken some steps to strengthen banks' portfolios and recapitalize the banks, which, themselves, have been provisioning against bad debts.

The authorities are planning major reforms in 1993 to make the tax system more efficient, transparent, and equitable. From the start of the year, a value-added tax will replace the turnover tax, various direct taxes will be incorporated into a new income tax, and social security funds will be established.

Czechoslovakia rejoined the IMF on September 20, 1991, and its quota is SDR 590 million (about $806 million). Czechoslovakia's outstanding financial obligations to the IMF resulting from past operations and transactions currently total the equivalent of SDR 986 million (about $1,347 million). Press Release No. 92/29, April 3

Stand-By, Extended, Structural Adjustment Facility (SAF), and Enhanced Structural Adjustment Facility (ESAF) Arrangements as of February 29, 1992

(million SDRs)

Member	Date of Arrangement	Expiration Date	Amount Agreed	Undrawn Balance
Stand-by arrangements			**7,214.43**	**4,893.08**
Algeria	June 3, 1991	March 31,1992	300.00	75.00
Argentina	July 29,1991	June 30, 1992	780.00	487.50
Barbados	February 7, 1992	May 31, 1992	23.89	15.36
Brazil	January 29, 1992	August 31, 1993	1,500.00	1,372.50
Bulgaria	March 15, 1991	March 14, 1992	279.00	50.38
Cameroon	December 20, 1991	September 19, 1992	28.00	20.00
Congo	August 27, 1990	May 26, 1992	27.98	23.98
Costa Rica	April 8, 1991	April 7, 1992	33.64	12.00
Côte d'Ivoire	September 20, 1991	September 19,1992	82.75	66.20
Czechoslovakia	January 7, 1991	April 3, 1992	619.50	99.56
Dominican Republic	August 28, 1991	March 27, 1993	39.24	39.24
Ecuador	December 11, 1991	December 10, 1992	75.00	56.44
Egypt	May 17, 1991	November 20, 1992	278.00	174.40
El Salvador	January 6, 1992	March 5, 1993	41.50	41.50
Gabon	September 30, 1991	March 23, 1993	28.00	24.00
India	October 31, 1991	June 30, 1993	1,656.00	1,356.00
Jamaica	June 28, 1991	June 30, 1992	43.65	32.75
Jordan	February 26,1992	August 25, 1993	44.40	44.40
Mongolia	October 4, 1991	October 3, 1992	22.50	11.25
Morocco	January 31, 1992	March 31, 1993	91.98	73.58
Nicaragua	September 18, 1991	March 17,1993	40.86	23.83
Nigeria	January 9, 1991	April 8, 1992	319.00	319.00
Panama	February 24, 1992	December 23, 1993	93.68	68.63
Papua New Guinea	July 31, 1991	September 30, 1992	26.36	26.36
Philippines	February 20, 1991	August 19, 1992	264.20	207.58
Romania	April 11, 1991	April 10, 1992	380.50	62.40
Uruguay	December 12, 1990	March 15, 1992	94.80	85.80
Extended arrangements			**10,009.90**	**4,192.90**
Hungary	February 20, 1991	February 19, 1994	1,114.00	636.37
Mexico	May 26, 1989	May 25, 1992	3,253.40	233.10
Poland	April 18, 1991	April 17, 1994	1,224.00	1,147.50
Tunisia	July 25, 1988	July 24, 1992	207.30	51.83
Venezuela	June 23, 1989	March 22, 1993	3,857.10	1,851.50
Zimbabwe	January 24, 1992	January 23, 1995	343.80	272.60
SAF arrangements			**101.15**	**54.07**
Benin	June 16, 1989	June 15, 1992	21.91	6.26
Burkina Faso	March 13, 1991	March 12, 1994	22.12	15.80
Comoros	June 21, 1991	June 20, 1994	3.15	2.25
Lao P.D.R.	September 18, 1989	September 17, 1992	20.51	5.86
Rwanda	April 24, 1991	April 23, 1994	30.66	21.90
Sao Tome & Principe	June 2, 1989	June 1, 1992	2.80	2.00
ESAF arrangements			**2,499.28**	**890.62**
Bangladesh	August 10, 1990	August 9, 1993	345.00	115.00
Bolivia	July 27, 1988	July 2, 1992	136.05	22.68
Burundi	November 13, 1991	November 12, 1994	42.70	38.43
Ghana	November 9, 1988	March 5, 1992	386.55	—
Guinea	November 6, 1991	November 5, 1994	57.90	49.22
Guyana	July 13, 1990	July 12, 1993	81.52	26.57
Kenya	May 15, 1989	August 1, 1992	261.40	45.23
Lesotho	May 22, 1991	May 21, 1994	18.12	15.86
Madagascar	May 15, 1989	May 14, 1992	76.90	25.63
Malawi	July 15, 1988	September 29, 1992	66.96	5.58
Mauritania	May 24, 1989	May 23, 1992	50.85	33.90
Mozambique	June 1, 1990	May 31, 1993	85.40	45.75
Senegal	November 21, 1988	June 2, 1992	144.67	—
Sri Lanka	September 13, 1991	September 12, 1994	336.00	280.00
Tanzania	July 29, 1991	July 28, 1994	181.90	160.50
Togo	May 31, 1989	May 30, 1992	49.08	15.36
Uganda	April 17, 1989	April 16, 1992	179.28	19.92
TOTAL			**19,824.45**	**10,029.67**

Note: Figures may not add to totals because of rounding.

Data: IMF Treasurer's Department

Staff Papers Article Examines Latin America's Re-Entry into Financial Markets

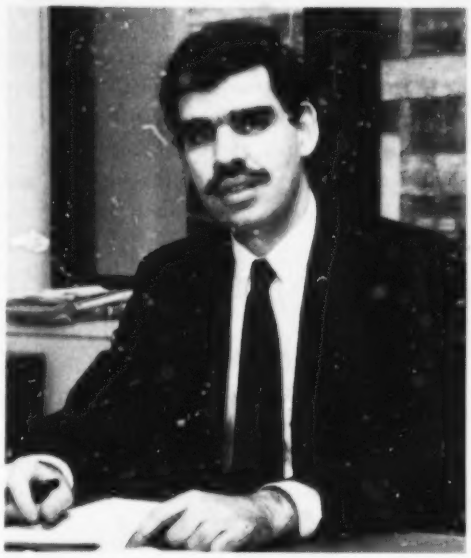
How, after a prolonged and near-total reliance on debt restructurings and concerted bank loans, have some Latin American countries managed to regain access to voluntary financing from international capital markets? To what extent—and on what terms—have they achieved this? These are some of the issues addressed by Mohamed A. El-Erian in an article in the March issue of *Staff Papers*, the IMF's scholarly journal. Other articles include a wide-ranging survey of theories of exchange rate determination and an examination of real exchange rate targeting under capital controls.

Latin America's Market Re-Entry

El-Erian notes that the outbreak of debt-servicing problems in several Latin American countries in 1982 led to a virtual drying up of voluntary financing: the flows from medium- and long-term bank credits and bonds totaled only $7 billion throughout 1983–88, compared with $25 billion in 1982 alone. But he points to many signs suggesting that, over the last two years, credit flows to the region have resumed, especially to Chile, Mexico, and Venezuela. Notably, bond and equity financing have increased; market terms have improved; voluntary commercial bank lending has resurfaced, although to a limited extent; and foreign direct investment and capital repatriation have risen substantially.

What has accounted for this turnaround? El-Erian cites four main elements: the successful implementation of economic policies, appropriate restructuring of existing debt, lower transaction costs for accessing capital markets, and the customizing of financing instruments to market conditions.

Economic policy implementation has been "the critical factor in the restoration of voluntary access," according to El-Erian. He stresses three policy achievements: first, domestic financial imbalances have been reduced owing to improved budgetary performance and prudent monetary policies; second, the supply responsiveness of economies has been sharpened through better pricing policies, including those making tradables sectors more competitive; and, third, economic efficiency has been improved through structural reforms, including trade, tax, financial, and legal reforms, and privatization and deregulation.



Mohamed El-Erian: Voluntary credit flows to Latin America are picking up.

Although the sustained implementation of sound policies is a necessary condition for market re-entry, it may not always be sufficient, according to El-Erian. He points out that policies can often be undermined by the size of a country's debt. This so-called debt-overhang effect can make the private sector highly risk averse because of doubts about the authorities' ability to meet future contractual payments without raising effective taxes. A fundamental restructuring of existing debt has been necessary, which Chile, Mexico, and Venezuela have done through market-based debt- and debt-service-reduction operations.

The *lower transaction costs* for accessing international capital markets have, according to El-Erian, resulted mainly from regulatory changes in industrial country capital markets and from increased market-credible information on borrowers' creditworthiness. The regulatory changes—the most important of which have occurred in U.S. markets—have made it easier for developing country borrowers to make bond and equity placements, while the improvement in available information (for example, the establishment of credit ratings for Mexico) has reduced some of the costs investors incur in compiling purchase information.

Finally, El-Erian notes, the *customizing of financial instruments* to market requirements became especially important when market conditions tightened, as they did in 1990. Re-entry of Latin American countries into the bond markets at that time was eased when they made their offerings more attractive through collateralization, preferential treatment for privatization, and early redemption possibilities.

What are the implications of Latin

American countries' re-entry into capital markets—both for other developing countries and for themselves?

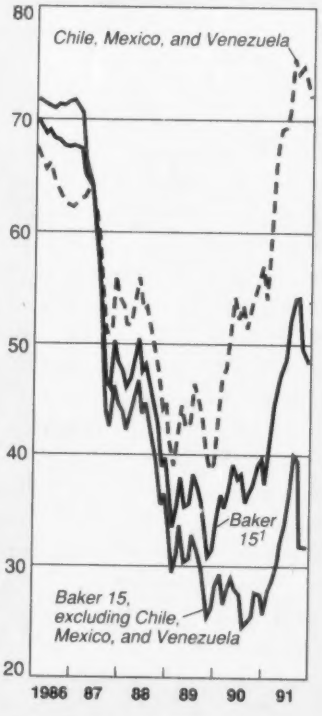
In addition to the substantial indirect benefits, the restoration of access to voluntary financing provides a wider and more flexible range of instruments to fund productive activities, according to El-Erian. Given the relatively small magnitude of recent Latin American borrowing relative to the size of the markets, the re-entry of Latin American borrowers is "unlikely to lead to any significant tightening of market conditions."

El-Erian points out that the implementation of sound economic and financial policies—and an avoidance of another round of excessive borrowing—will be the key to continued access to capital markets on favorable terms. Supporting efforts would include measures to reduce exposure to exogenous price shocks (through greater use of financial risk-management techniques, such as interest rate and commodity hedges).

Although noting that "the greatest impact will come from the actions borrowers themselves take," El-Erian suggests that the industrial countries can also help developing countries return to voluntary financing. They can continue to ease entry to some parts of the international capital markets, as appropriate, and introduce greater flexibility in some regulatory provisioning requirements.

Secondary Market Prices For Latin American Loans Have Risen the Most

Prices of Developing Country Loans in the Secondary Market
(percent of face value)



[1] Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.

Data: IMF, *Staff Papers*

Exchange Rate Economics

In their survey of exchange rate economics, Ronald MacDonald and Mark P. Taylor examine the theoretical and empirical validity of the main views of exchange rate determination that have evolved since the early 1970s: the "monetary approach" and the "portfolio balance approach." They also briefly review the literature on foreign exchange market efficiency and international parity conditions.

The Monetary Model. The authors note that the basic rationale behind the monetary approach is that since an exchange rate is, by definition, the price of one country's money in terms of that of another, it makes sense to analyze the determinants of that price in terms of the outstanding stocks of and demand for the two monies.

In its early formulation (in which prices are assumed to be flexible), the monetary model relies on the twin assumptions of continuous purchasing power parity (PPP) and stable money demand for both the domestic and foreign economies. The domestic money supply determines the domestic price level and, thus, the exchange rate. Specifically, an increase in the domestic money supply relative to the foreign money stock leads to a rise in prices, following which PPP ensures a fall in the value of the domestic currency in terms of the foreign currency.

A problem with this version of the monetary approach, the authors state, is that it assumes continuous PPP—under which, by definition, the real exchange rate cannot vary. Yet, experience shows wide swings in real exchange rates, reflecting shifts in international competitiveness.

A later version of the monetary model assumes less flexible, or "sticky," prices. This model allows for substantial overshooting of both nominal and real exchange rates beyond their long-run equilibrium (PPP) levels. Overshooting occurs because some variables in the system (exchange rates and interest rates) move faster than other variables (prices of goods) in the short run. In the medium run, however, the more sluggish variables catch up, and the exchange rate converges to the long-run equilibrium (PPP) level.

"The sticky-price monetary model is clearly an advance over the simple (continuous PPP) monetary model," according to the authors. But it remains fundamentally monetary in that it focuses on equilibrium conditions in the money market. It is able to do this by assuming perfect substitutability of nonmoney assets. This assumption is relaxed in the portfolio balance model.

The Portfolio Balance Model. The authors note that, as in the monetary models, the level of the exchange rate in the portfolio balance model is determined, at least in the short run, by

supply and demand in financial asset markets. The exchange rate, however, both helps to determine, and is partly determined by, the current account of the balance of payments. A surplus (deficit) on the current account represents a rise (fall) in the net domestic holdings of foreign assets, which affects the level of wealth, which, in turn, affects the level of asset demand, which again affects the exchange rate.

The authors note that, like the sticky-price model, the portfolio balance model allows one to distinguish between short-run equilibrium (supply and demand equated in asset markets) and the adjustment to long-run equilibrium. But unlike the sticky-price model, it also allows for interaction between the exchange rate, the balance of payments, the level of wealth, and the stock of foreign assets.

Empirical Evidence. In surveying the empirical evidence on the validity of the models of exchange rate determination, the authors cite a number of studies. Their broad conclusion is that although both the approaches are quite well supported by the evidence from the interwar years and the post-Bretton Woods era up to 1978, their ability to explain exchange rate behavior after 1978 is inadequate. One possible reason is that foreign exchange rates may have deviated from their underlying "fundamental" levels (that is, as predicted by economic theory) because of the influence of "chart analysts" (foreign exchange analysts who base their predictions of currency movements on graph patterns). In support of this view, the authors point to a survey confirming that a high proportion of London's foreign exchange dealers used some form of chart analysis in forming their trading decisions, especially at shorter time horizons. At longer time horizons, however, the dealers gave more weight to economic fundamentals. The authors suggest that "more atten-

Currency Units per SDR

Currency	MARCH 20	23	24	25	26	27	30	31	APRIL 1	2
Deutsche mark	2.27623	2.27605	2.27012	2.26306	2.26241	2.26217	2.25532	2.25336	2.25759	2.25664
French franc	7.7279	7.71381	7.68787	7.67928	7.67567	7.686	7.64697	7.63716	7.65871	7.64874
Japanese yen	...	182.506	182.098	183.1	182.503	182.947	182.028	182.716	181.258	184.081
Pound sterling	0.795314	0.795265	0.791823	0.790981	0.791032	0.791531	0.789411	0.788719	0.791746	0.791248
U.S. dollar	1.35935	1.36046	1.36352	1.36642	1.36809	1.36555	1.37018	1.37174	1.36592	1.36609
Argentine austral	1.34888	...	...	...	...	...	...	...	...	...
Australian dollar	1.78674	1.78843	1.78987	1.78757	1.78532	1.78643	1.78945	1.78519	1.78249	1.78457
Austrian schilling	16.0376	16.0357	15.9682	15.9243	15.9218	15.9319	15.8845	15.8655	15.872	15.8972
Bahrain dinar	0.511116	0.511533	0.512684	0.513774	0.514402	0.513447	0.515188	0.515774	0.513586	0.51365
Bangladesh taka	52.7426	52.7858	52.9046	53.0171	53.0819	52.9833	53.163	53.4979	53.2709	53.2775
Belgian franc	46.9452	46.9393	46.7824	46.6223	46.604	46.6165	46.409	46.3511	46.4754	46.4641
Brazilian cruzeiro	2501.07	2527.63	2557.83	2568.	2616.2	2636.67	2671.58	2700.96	2715.31	2741.74
Canadian dollar	1.6285	1.62303	1.62504	1.62467	1.62789	1.62309	1.63134	1.63223	1.62722	1.62947
Colombian peso	993.617	...	997.21	999.331	1001.61	1000.33	1004.25	1005.95	1002.11	1002.78
Danish krone	8.85481	8.84843	8.82743	8.79428	8.78519	8.79073	8.75134	8.74141	8.75964	8.76142
Ecuadoran sucre	...	...	...	...	...	...	...	...	...	...
Finnish markka	6.20951	6.20778	6.19993	6.18665	6.17009	6.17502	6.16307	6.14951	6.1644	6.17336
Guatemalan quetzal	...	...	...	...	...	...	...	...	...	...
Indian rupee	35.1936	35.2223	35.3015	35.3766	35.4199	35.3641	35.474	35.5143	35.3837	35.3681
Indonesian rupiah	2740.45	2744.05	2750.22	2756.07	2759.44	2756.66	2763.65	2766.8	2755.06	2756.77
Iranian rial	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
Iraqi dinar	0.422564	0.422909	0.42386	0.424762	0.425281	0.424491	0.42593	0.426416	0.424606	0.424659
Irish pound	0.854776	0.851245	0.849863	0.848234	0.849534	0.84954	0.846993	0.845865	0.847976	0.847924
Italian lira	1711.41	1709.48	1706.04	1704.64	1707.25	1706.98	1701.18	1699.52	1702.31	1702.99
Kuwaiti dinar	...	0.40271	0.402907	0.403763	0.403546	...	0.403504	0.40432	0.402837	0.403762
Libyan dinar	0.396429	0.396429	0.396429	0.396429	0.396429	0.396429	0.396429	0.396429	0.396429	0.396429
Malaysian ringgit	3.52112	3.51407	3.51515	3.52673	3.53446	3.53677	3.54301	3.54554	3.53364	3.53544
Maltese lira	0.445367	0.446448	0.445449	0.445073	0.443911	0.445298	0.443223	...	0.442747	0.444517
Mexican peso	...	...	...	...	...	...	...	4207.13	...	...
Nepalese rupee	58.0442	58.0916	58.2223	58.3461	58.4174	58.309	58.5067	58.5733	58.3248	58.332
Netherlands guilder	2.56591	2.55698	2.55319	2.54796	2.55053	2.5488	2.53977	2.53621	2.54143	2.54065
Norwegian krone	8.95254	8.94843	8.91878	8.89539	8.89368	8.89355	8.85493	8.84251	8.8655	8.8662
Omani rial	0.52267	0.523097	0.524273	0.525388	0.526031	0.525054	0.526834	0.527434	0.525196	0.525262
Pakistan rupee	33.9325	34.0284	34.1049	34.1774	34.2604	34.1908	34.3127	34.3518	34.2081	34.2103
Portuguese escudo	196.074	196.019	195.383	194.967	194.954	194.972	194.409	194.248	194.827	194.628
Qatar riyal	4.84803	4.95207	4.96321	4.97377	4.97985	4.9706	4.98746	4.99313	4.97195	4.97257
Saudi Arabian riyal	5.09077	5.09492	5.10638	5.11724	5.1235	5.11398	5.13132	5.13717	5.11537	5.11601
Singapore dollar	2.26277	2.26843	2.26858	2.2647	2.26528	2.27228	2.26902	2.27777	2.26351	2.26839
South African rand	3.93057	3.93106	3.93922	3.94076	3.94763	3.94576	3.94751	3.94371	...	3.94254
Spanish pesata	143.893	143.361	142.986	142.917	143.075	143.064	142.66	142.413	142.963	142.945
Sri Lanka rupee	58.6695	58.7719	58.9041	59.0293	59.1015	59.0191	59.2192	59.3278	59.076	59.0971
Swedish krona	8.27504	8.27568	...	8.21902	8.21675	8.22061	8.18724	8.19889	8.19625	8.19449
Swiss franc	2.06417	2.0679	2.06184	2.05851	2.05624	2.06335	2.05733	2.05555	2.06254	2.06184
Trinidad and Tobago dollar	5.79168	5.79641	5.80945	5.8218	5.82892	5.8181	5.83782	5.84447	5.81967	5.8204
U.A.E. dirham	4.99017	4.99425	5.00548	5.01613	5.02226	5.01293	5.02993	5.03566	5.01429	5.01492
Venezuelan bolivar	88.2626	88.4299	89.106	89.0906	89.0832	88.6925	89.233	89.2317	88.8189	88.7959

Note: The value of the SDR in terms of the U.S. dollar is determined as the sum of the dollar values, based on market exchange rates, of specified quantities of the first five currencies shown above. The value of the SDR in terms of any currency other than the U.S. dollar is derived from that currency's exchange rate against the U.S. dollar and the U.S. dollar value of the SDR. Exceptions are the Iranian rial and the Libyan dinar, the values of which are officially expressed directly in terms of currency units per SDR.

Data: IMF Treasurer's Department

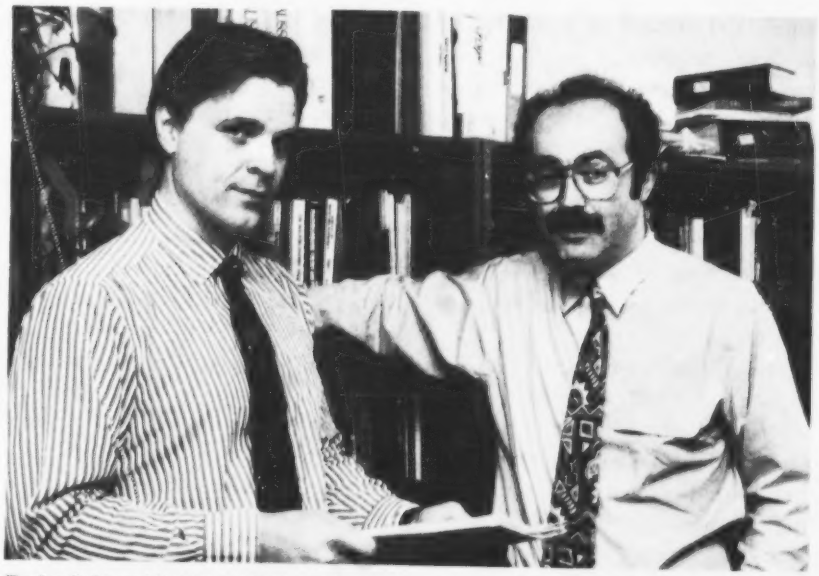
tion ought to be focused on modeling the *long-run equilibrium* exchange rate." Such an effort would also enable many other possible influences on exchange rates to be taken into account.

Real Exchange Rate Targeting

Peter J. Montiel and Jonathan D. Ostry develop a model to examine whether the money supply can serve as a nominal anchor for the domestic price level under real exchange rate targeting when capital controls are in place.

The authors note that active exchange rate management has become increasingly common among developing countries in recent years. These countries have frequently resorted to depreciating their nominal exchange rates to offset differences in domestic and foreign inflation rates, and thus preserve competitiveness. In the process, such countries have sacrificed the role of the exchange rate as a nominal anchor for the price level. Since price stability remains an important macroeconomic goal in such countries, the question arises as to whether the role of the nominal anchor can instead be provided by a policy-controlled financial aggregate, such as the money supply.

The authors show that, when capital controls are perfect (so that the official and unofficial markets for foreign exchange are permanently segmented), the government can, indeed, stabilize inflation by targeting the money supply. However, they also show that with stable inflation, an ever-widening gap would emerge between the official and unofficial exchange rates in the long run. Since this gap would create incentives to engage in cross transactions between official and unofficial markets, the effectiveness of the capital controls would be undermined. With imperfect capital controls, the authors find that monetary targeting is ineffective in stabilizing the price level. The reason, they suggest, is simply that, in the presence of capital leakages, the long-run behavior of the economy is identical to that of an economy with perfect capital mobility. In such an economy, the money supply becomes endogenous and thus cannot be targeted to serve as a nominal anchor. The same therefore applies to an economy with capital leakages. The authors also argue that if capital controls are nevertheless used temporarily to target money growth, a monetary rule would still fail to stabilize inflation even in the *short* run.



Taylor (left) and MacDonald: The main exchange rate models do not adequately explain currencies' behavior after 1978.

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